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OF THE USE OF MODERN CONTRACEPTIVE  
AMONGST FOREIGN STUDENTS»

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## **LIST OF ABBREVIATIONS**

1. World Health Organization (WHO)
2. Sexual And Reproductive Health (SRH)
3. Sexually Transmitted Diseases (STIs)
4. Millennium Development Goals (MDGs)
5. Sexual And Reproductive Health And Right (SRHR)
6. Sustainable Development Goals (SDGs)
7. Human Immune Deficiency Virus (HIV)
8. Intra-uterine devices (IUD)
9. Lactational Amenorrhea Method (LAM)
10. Emergency Contraceptive (EC)

## INTRODUCTION

With the global population today standing at over 6 billion, and world population likely to be increased by 2.5 billion over the next 43 years, rapid population growth has become a burden on the resources of many developing countries and has given rise to the concept of family planning which in return has huge contributions in the enhancement of the quality of life of the people. (Sherpa, Sheilini, & Nayak, 2013)

Family planning enables people to have their desired number of children and be able to determine the spacing of pregnancies. Family planning is achieved through the use of contraceptive methods and the treatment of infertility (WHO, 2018). This implies that with the practice of family planning, individuals of reproductive ages would be able to be in control of the number of children they have and want and the timeframe these children made and this is achieved with the use of contraceptives. Lately, there has been a slight increase in the global use of contraceptives, however, the unmet need is still very high and this is caused by the steady increment in population size and the lack of family planning services (WHO, 2018).

The unmet need in this case is defined as the percentage of sexually active fertile women who are not in use of any method of contraception and report that do not want more children or desire to delay their next pregnancy. The contraceptive prevalence was reported to have increased from 2000 to 2015, moving up from 55.6% to 61.2% (World Health Organization, n.d.-a, pp. 1–3)

Access to sexual and reproductive health (SRH) plays a dominant role in the improvement of quality of life. Reproductive health was defined as the complete state of mental, physical and social wellbeing and not just the absence of pathology (World Health Organization, 2019). Unfortunately, many neglect the importance of SRH forgetting how widely spread it is in relation to health issues like family planning, avoidance, diagnosis and treatment of sexually transmitted diseases (STIs) and adolescent SRH. If given attention, proper SRH can prevent poor SRH like

unnecessary and unsafe abortions, unwanted pregnancies and reduce transmission of STIs (World Health Organization, 2019).

In developed and developing countries, there is an extensive difference in SRH practices and the female population are usually affected by sexual diseases and unwanted pregnancies (Kistnasamy, Reddy, & Jordaan, 2009). Women in many countries do not get the modern contraception they need. The unmet need and contraceptive prevalence serves as an indicator to assess progress in relation to the millennium development goals (MDGs). It was marked as an unfinished agenda in realizing universal access to sexual and reproductive health and right (SRHR) and it is inclusive in the sustainable development goals (SDGs) 2015-2030 (World Health Organization, n.d.-a, pp. 1–3).

Parents wish for healthy and fulfilling lives for their children but unfortunately, when these children start to develop in their teenage lives and commence intimate relationships, development a sense of self awareness, they are usually denied proper information and education that would encourage them to make healthy and informed decisions. This is because of the fear that giving young people and teenagers sexual education may persuade them to engage in sexual activities (World Health Organization, n.d.-b, pp. 1–3).

Teenage pregnancies, human immune deficiency virus (HIV) and other sexually transmitted diseases pose as serious public health issues and this is because there are associations between them and maternal, neonatal, fetal and other unpropitious outcomes. Pregnant teenagers have more chances of giving up school and education and also, teenage parents are most doubtful to have the social and economic means to sustain and raise their children (Hagan & Buxton, 2012).

Sexual activeness amongst young people and their vulnerability to unintended pregnancies have lured substantial attention from researchers for the main purpose of recognizing its vastness and addressing it as an issue (Renjhen, Kumar, Pattanshetty, Sagir, & Samarasinghe, 2010)

In Ukraine, the abortion rate is observed to be high and the use of efficient contraceptive methods is little. Family planning counselling in most cases is provided by obstetricians and gynecologists either in hospitals or family planning clinics (Podolskyi, Gemzell-Danielsson, & Marions, 2018). African students should have access to this information and counselling as well as other foreign students in Ukraine.

With this proposed research, information acquired would give an eyesight for different programs with the goal of addressing unintended pregnancies and proper family planning education among foreign students across Ukraine. This would encourage family planning and create even more awareness among foreign students in Ukraine.

The aim of the research is to investigate the understanding of students in relation to family planning and different modern contraceptive methods and describe their knowledge, attitude and practice towards this issue and also to provide guidance on current methods of contraception.

Objectives of the study are:

1. To identify and assess different challenges and issues associated with family planning in Ukraine and worldwide.
2. To describe the knowledge, attitude, beliefs and practices Foreign students of universities in Ukraine have towards family planning and modern contraceptive.
3. To educate and give recommendations on family planning and modern contraceptives to Foreign students in Ukraine.

Subject of the study: family planning and modern contraceptives among Foreign students in Ukraine .

Object of the study: family planning and modern contraceptive methods.

Hypotheses were formulated as follows:

1. Foreign students in Ukraine have little or no knowledge about family planning and modern contraceptives.

2. Medical students will have more knowledge of family planning and modern contraceptive than students from non-medical universities.
3. Students will not know different types of contraceptives.
4. Above 70% will use barrier methods(condoms).
5. Students with better awareness and knowledge will have a satisfactory attitudes and practices.
6. Students will not know the difference between modern and traditional types of contraception.

## **PART 1.**

### **FAMILY PLANNING AS A PRIORITY IN REPRODUCTIVE HEALTH**

#### **1.1 Young Adults And Risk Of Unintended Pregnancies.**

In recent times, young adults in their teens and late 20s have significantly higher chances and rates of getting pregnant without the intention to do so. Usually, these rates are higher in young adults than women in older age groups. In existing research, variation of results were produced in relation to the association between knowledge about reproductive health and different contraceptive methods and different behaviors regarding them. Sex education has been the base of knowledge about reproductive health and contraceptive according to many studies (Frost, Lindberg, & Finer, 2012).

Young adults from developing countries have unintended pregnancies constituting as a major problem to their reproductive health. Without doubt, young females experience their first menstruation earlier in comparison with past times. With that, there are usually an early start in sexual activities among young people which leaves them vulnerable to have unprotected sexual intercourse and in return leading to high probabilities of unintended pregnancies. This is usually prevalent in African countries where low contraceptive usage and exceptionally high unmet needs of family planning are identified. Young adults may experience different obstacles exercising proper family planning and contraceptive usage. These obstacles may come in forms of deficits in knowledge which helps them make good decisions, risk perceptions and hostility from male partners. Despite the acknowledgement of the significance of young adults meeting their reproductive needs and awareness of modern contraceptive methods among young adults, low level of contraceptive use has been recorded (Hagan, et al., 2012).

Unfortunately, these young adults are often misinformed about their sexual and reproductive competences. Two-third of young girls have been studied to have misconceptions about pregnancy, where they think they may not be of age or mature enough to get pregnant. The low utilization of contraceptive among young adult can be linked to ignorance and of course poor sex education (Cobb, 2001).

There are different types of contraceptives which are available, however, high unplanned pregnancy rates are still noted. 25% of maternal deaths can be averted by preventing or reducing unintended pregnancies and life-threatening abortions with the use of various methods of modern contraceptives (Sherpa et al., 2013, p. 118). Young adults should not be deprived of sexual and reproductive education which would educate and enlighten them on various contraceptive types, side effects and encourage them to make informed choices.

## **1.2 Trends In contraceptive prevalence by preferences or methods.**

Identification of trends in contraceptive prevalence especially by preferences or methods can be valuable. Contraceptive prevalence is defined as the percentage of women who are in use of at least one defined method of contraceptive or who have sexual partners that are in use of at least one specific method of contraceptive. It is normally described for women between the ages of 15 to 49 (World Health Organization, 2016).

The successful measurement of the progress in meeting family planning needs are based not only on the assessment of contraceptive prevalence general levels and trends but also contraceptive prevalence assessed established on type and range. By 2030, according to the SDGs, global accessibility to reproductive and sexual health services which creates room for information, family planning, education and the incorporation of reproductive health into nationwide programs and strategies should be ensured (United Nations, Department of Economic and Social Affairs, Population Division, 2019).

To be able to victoriously pinpoint trends in contraceptive prevalence by preferences, modern methods of contraception and traditional methods of

contraception must be distinguished accurately. Modern contraceptives vary in kinds; hormonal pills, intra-uterine devices(IUD), male and female sterilization, male and female condoms, emergency contraceptives, injectables and implants can be generalized as modern methods of contraception. In contrast, traditional methods which are also known as natural contraceptives includes withdrawal, periodic abstinence, lactational amenorrhea method(LAM). Unfortunately, in Europe, there is a recognized lack in data and information on unmet needs in relation to family planning (United Nations, Department of Economic and Social Affairs, Population Division, 2015).

Regardless of the extensive spread of how beneficial and useful different modern methods of contraception are, there is a significantly high rate of unmet needs of family planning among middle and low income countries with a prevalence of 15-58%. Low rate of usage can be attributed to several reasons like lack of knowledge, interpersonal barriers for example, peer pressure and partners respectively, lack of access, side effect and many more. 210 million women get pregnant yearly worldwide with 38% of these pregnancies standing without intension. In 18 sub Saharan countries for example, there was a health and demographic survey which gave results stating that 82.6% of adolescents in these countries were not actively using any contraceptives with 43.35 of them having a minimum of one child. 31.5% of these young people reported the pregnancies were not with intension at the point they conceived (Oketch, 2019)

Certain contraceptive methods prevalence stretches widely globally. Over the years, there has been a shift in method mix and this is due to changes of various kinds. Changes in healthcare systems, policies, technologies and access to different kinds of contraceptives are responsible for this shift. Governments across the world have engaged in different activities to promote the usage of specific contraceptive methods and the usage of reproductive health and family planning services respectively. Globally, about 922 million in their reproductive ages are active contraceptive users (United Nations, Department of Economic and Social Affairs, Population Division, 2019).

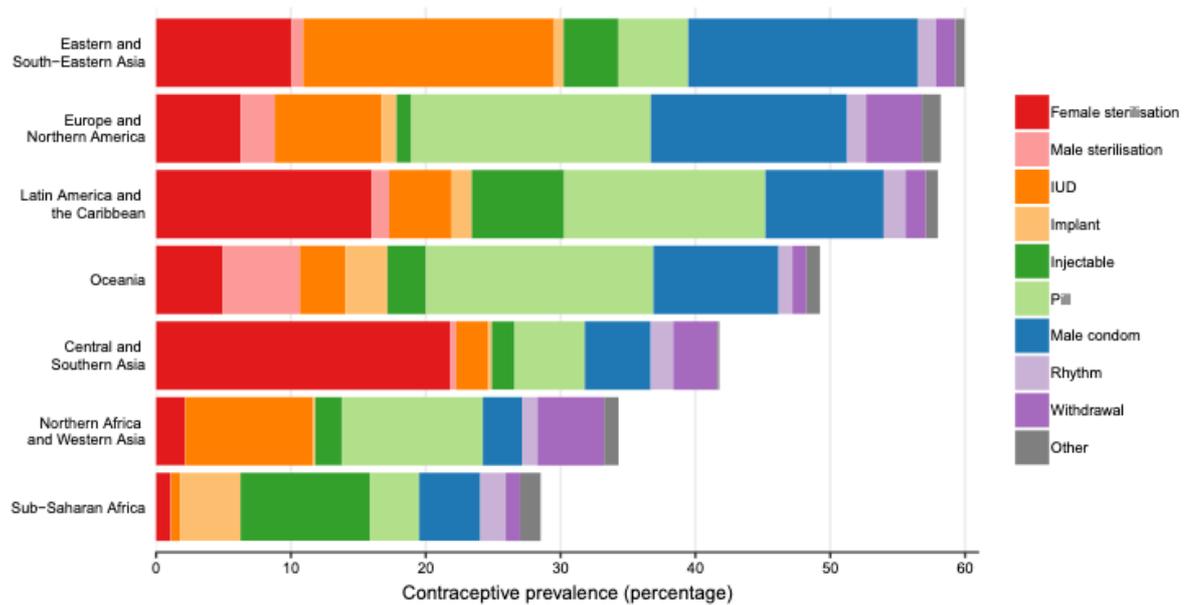


Figure 1 Estimated regional contraceptive prevalence according to specific methods among women aged 15-49, 2019 (United Nations, Department of Economic and Social Affairs, Population Division, 2019).

Between 1970 and 2015, the contraceptive prevalence had nearly a double increase ranging from 36% to 64% (United Nations, Department of Economic and Social Affairs, Population Division, 2015). Regardless, low levels have been recorded in the sub Saharan parts of Africa. Identifying different trends in prevalence by specific methods is essential. Female sterilization and male condoms are the two most frequently utilized contraceptives in world as of 2019, which about 46.1% of the contraceptive users rely on short acting methods like condoms. However, about 45.2% use permanent methods like male and female sterilization. Based on male participation, like the male condoms, withdrawal and male sterilization, 27.4 percent of the contraceptive use was recorded in 2019. In European countries, pills usage has the highest prevalence with about 20 percent of women from reproductive ages globally. Between 1994 and 2019, there was an increment from 195 million to 219 million in the number of women who depend on female sterilization. Also, there was an increase

from 133 million to 159 million in the number of women who depend on IUDs (United Nations, Department of Economic and Social Affairs, Population Division, 2019).

### **1.3 Societal Sexual Norms, Dynamics And Risky Sexual Behaviors**

High rates of premarital sexual activities, unlawful abortions and unintended pregnancies have stayed constant among students especially in the university level. For these rates to be remarkably reduced, an extensive discernment on the knowledge of contraceptive utilization and sexual behaviors among these groups of students should be addressed (Somba, Mbonile, Obure, & Mahande, 2014).

In a study conducted in Africa, Nigeria, about 896 young people between the ages of 11 to 25 were enrolled. Results were outrageous. About 33 percent of the participants were reported to have already been exposed to their first sexual activities, however, it was reported more among the male gender. In this study, it was discovered that one half of the participants that have experienced sexual activity agreed to having above one sexual partner and that was at the time the study was carried out, for example, 48 percent of the university students in Ibadan who are young adults or adolescents were reported to have multiple sexual associates. Respondents from Gwari and Hausa tribes which are occupants of the northern part of Nigeria reported that they did not practice any form of family planning or use any contraceptive method at their initial sexual encounter unlike the participants from the Ibo and Yoruba tribes. Risks in this concept could be eluded by introducing programs and campaigns to strengthen reproductive health. Young people are often adventurous, self-reliant and are seen to calibrate according to demand. In this way, societal sexual norms and activities become a thing of interest among adolescents and young people in general. In a typical African and Nigerian home, traditional norms like sexual restraining must be obeyed until marital vows are duly exchanged between the two parties. However, in recent times, these traditional norms have been forgotten across the nation being Nigeria and of course other African countries. Sexual behaviors of young people and adolescents are fast growing and becoming a public health distress as most of them have their first sexual

encounter between 10 and 16 age bracket. Other than risk of unintended pregnancies and abortions from risky sexual behaviors, adolescents and young people are at risk of getting STIs like HIV. Unfortunately, young people tend to procrastinate abortions hereby giving them little or no option but to go to unqualified personnel's hereby leaving them prone to complications (Sunmola, Dipeolu, Babalola, & Adebayo, 2003).

Abortions in Ukraine are often performed on demand, however, it is only allowed and performed until the twelfth week of gestation. These abortions are performed in either the private clinics or the government clinics. For a typical Ukrainian, as medical care is free, abortions are relatively free also except in special cases of infections and other related complications. Tracing back to 1995, Ukraine had one of the highest abortion rates in Europe which was 58.2 per 1000 women between 15 to 49 years of age (podolskyi et al., 2018, p. 5). Foreign students in Ukraine may not have such privileges of having free medical care and so abortions may be challenging financially to these students.

Risky sexual behaviors are simply behaviors that expose one to the risk of contracting a sexually transmitted disease or exposing one to harm. For example, in the females, sexual activities and behaviors that can expose them to unintended pregnancies can be considered a risky sexual behavior. In a study, the association between social backgrounds and risky sexual behaviors was conducted in a young adult sample with a mean age of 20.2 years, five settings and four risky sexual behaviors were examined. Such behaviors like unprotected sexual intercourse when not intoxicated, unprotected sexual intercourse when intoxicated, casual sex when not intoxicated and casual sex when intoxicated were examined. Associations with alcohol usage were also examined. It was identified that going for more fraternity parties gives chances of having sexual intercourse especially for the females. Other associations like going to bars without dance floors and attending huge private parties were found to be in connection with sexual activity. It is indeed important to link risky sexual behaviors to social habits (Hittner, Owens, & Swickert, 2016)

Peers are usually seen to have direct and indirect impacts on sexual behaviors as they are an important component in the immediate social environment (Fearon, Wiggins, Pettifor, & Hargreaves, 2015, p. 63). A study recognized sexual norms and behavioral patterns in relation to sexual risk and pregnancy among males aged 13 to 20 years who were involved in dating violence. About 6 focus groups were created where themes were formed, such as gains of social status from claims of sexual activity, views on rape where rape is seen as uncommon and females who claim to have been raped are seen as liars, rationalized rape in avoidance of responsibility, sex with substance use and rape without condom, views on girls looked at as liars when it comes to pregnancy as a tool to lure males into relationships and lastly, eluding responsibility by males and bad responses to pregnancies. The foundation of all these themes were studied and it was discovered that the integration of peer supported norms in relation to male multiple partnering and adverse sexual beliefs (Silverman et al., 2006, p. 734).

The theory of social norms is multilateral. There are live confirmations that societal norms directly and indirectly affect the sexual and reproductive health of young adults (Beniamino & Holly, 2018).

#### **1.4 Misconceptions On Emergency Contraceptive Pills (ECPs)**

The availability of emergency contraceptive pills are favorable across the world, however, there are high records of unwanted and unintended pregnancies globally. The knowledge of the ECPs are high but then the usage is recorded as low. In the United Kingdom Of Great Britain And Northern Ireland, it was recorded that about 91% of the women there had heard about the term ECPs or the morning after pill but in the past one year, only about 7% of these women were recorded to have used ECPs. Reasons for the low and correct usage is often attributed to lack of basic comprehension of pregnancy, contraception and fertility (World Health Organization, 2011)

Emergency contraception is a type of modern contraception that is utilized after sexual intercourse to avert pregnancy which is administered in a time frame of 5 days after intercourse but it is more effective if used sooner after intercourse (World Health

Organization: WHO, 2018). In a qualitative study conducted in Ghana to comprehend the settings and patterns of emergency contraceptive pills usage among pregnant women, 32 young females who are sexually active and unmarried aged 18 to 24 years were incorporated into in-depth interviews. This was conducted to explore their views and their encounters in relation to sexuality and contraceptive. Also, it was conducted to identify different factors affecting their choice of emergency contraceptive pills. According to the study, it was discovered that the majority of the participants had used at least once ECPs. They explained that they usually do not plan to have sexual intercourse and by that, they prefer to use the ECPs as a post sexual exposure method. It was stated that participants confessed to use ECPs but were afraid of the disruptive side effects it could have on their health and their menstrual cycles. When failure in the withdrawal method is a traditional form of contraceptive is sensed, ECPs are resorted to in most of the cases. Many had the wrong information about ECPs, for example, information on dosage, information on usage and information on which particular pills were ECPs. Misconceptions among women who use ECPs were noticed, like washing after sexual intercourse as a preventive measure. Results from this study concluded that ECPs are commonly used among young women who live in urban areas however, there is still a spread of false information in regards to ECPs which raises a need to include the right information in programs relating to young people's sexual and reproductive health (Rokicki, 2018).

About 50 percent of pregnancies without intention can be averted if emergency contraceptive pills are rightly used at the right time especially when other methods have failed. Back in 2002, about 85 percent of adolescent pregnancies were without intention which gave rise to over 500,000 births and over 235,000 abortions globally (Kavanaugh, Megan Lynn, 2005). It is important to receive information in regards to knowledge, attitude and practice of emergency contraceptives among women. A study in Addis Ababa, Ethiopia with about 774 university students assessed the knowledge, attitude and practice of emergency contraceptives. 43.5 percent of the participants admitted to hearing about emergency contraceptive, a positive attitude was recorded in about 53 percent of the participants and only about 4.9 percent confessed to have used

emergency contraceptive (Tamire & Enqueselassie, 2007, pp. 1–3). In an in depth interview which included adolescents aged 15 to 19 years, significant gaps were identified in knowledge about emergency contraceptive pills and also, different misconceptions were identified especially the time interval between sexual intercourse and time of taking the emergency contraceptive pill. Another was about emergency pills working faster than other birth control pills, some thought that emergency contraceptive pill users are considered irresponsible. These different misconceptions among these teenagers were linked to opinions of people around them which in most cases are their family. These different misconceptions should be addressed among young adults, males and females inclusive (Mollen et al., 2008)

### **1.5 Perceived Barriers To Modern Contraceptives**

In a study conducted in 2004 in Burkina Faso, Ghana, Malawi and Uganda, where male and female participants aged 12 to 19 were surveyed. Findings based on the study showed that the young adults who were sexually active have the same discernment of blockades in receiving contraceptive methods of which this was mentioned by 42% to 64% of females and 38% to 59% of males who were sexually active. Furthermore, females were stated to feel timid, scared and embarrassed when asking or receiving contraceptive services or STI treatment in comparison with the males who participated in the study. This may be related to societal norms and traditional norms in these countries. Another barrier stated was the cost of services and absence of knowledge based on locations to receive contraceptives for example in Uganda. Males in the countries except Ghana stated they had no idea where to navigate to receive family planning services, however, more females knew where to go to receive such services. In three of the four participating countries, young adults gave information about their privacy not being regarded by the staff in many of these family planning and contraceptive facilities. Public clinics and hospitals were the most favored sources of family planning and contraceptive services for both the male and female participants. Without doubt, other service sources and locations like drugs stores were mentioned

and it was preferred more by the males than the females, however, clinics and hospitals were just the most preferred. Clinics and hospitals were assessed based on their privacy terms, respect, accessibility and cost. The formal clinics were perceived positively by the adolescents and young people. From the study, conclusions were drawn and it was discovered that social stigma is the main roadblock hindering young people and adolescents from receiving and obtaining family planning services and contraceptive methods. Other barriers like the costs, behavioral patterns of health workers, privacy and lack of knowledge of locations for services were also discovered (Biddlecom, Munthali, Singh, & Woog, 2007).

The most perceived barriers to receiving family planning and contraceptive services are societal pressure on the women, financial roadblocks, socioeconomic status and lack of access (Haider & Sharma, 2013, p. 405). Despite the different perceived barriers to contraceptive usage among young adults, the legal background of contraception plays a major role. Effects of laws on contraceptive utilization were investigated and it was recorded that countries that had more contraceptive utilization had more liberal contraceptive laws. In Africa, colonial origin were studied and it was discovered that countries with French colonies tighter laws than the British colonies (Finlay, 2017). In the United States Of America, high rates of unintended pregnancies and abortions were recorded and even among the rest of the western countries. These high rates are solid because most women who are in the minority group were reported not to have been using any contraceptive methods. Women who are poor, women from racial minorities and young women experience high rates of unintended pregnancies and this can be associated with poor contraceptive use and in most cases, they experience failures due to quality and efficacy. This gave rise to different studies which were based on exploring the accessibility of these women to contraceptive services (J. Silverman, Torres, & Forrest, 1987, p. 94).

In Kenya, a study was held among couples to explore different barriers to contraceptive usage and services. Focus groups were conducted, also, structured interviews were conducted among participant who had no intention to get pregnant and were not planning for pregnancy, and with participants who were not using any

contraceptive method effectively. Crucial barriers were identified among these couples who did not want pregnancy, barriers like absence of accord on which contraceptive method to use, decision making by their husbands affected by attitudes, sensed side effects which could be short term or long term, and many more. Low level knowledge of contraception was identified and recommendations for further spread of awareness, knowledge and clearance of myths, fears and misconceptions were encouraged by programs (Kamau et al., 1996). In many countries across the world, females who look for family planning services and contraceptives have complained of regular subjection to tests which are considered unnecessary, being told it is not safe, and many of them are required to present their husbands consent before being issue. Such factors may stand as a roadblock between women and receiving family planning services and contraceptive methods. Activities of this kind is usually referred to as Medical Barriers. Issues like side effects and contraindications of specific types of contraception can all be attributed under medical barriers (Cottingham & Mehta, 1993, p. 99).

In some countries, contraceptives are given for free , for example , there were affirmations from the European Union on Romania which designates that the country supplied free and subsidized family planning services and contraceptives and it was discovered that it significantly reduced the birth rates and as well, the pregnancy rates. When Family planning was initially launched in Romania, family planning centers and health centers provided free contraceptive to people and doctors prescriptions were not needed to make receive contraceptives in the pharmacies across Romania (SIMIONESCU, HOROBET, & BELASCU, 2017). This has its advantages and disadvantages whereby in many cases, these contraceptives may not be properly administered and used but on the other hand, the approach helped remove barriers regarding access to contraceptives and its utilization .

## **PART 2.**

### **RESEARCH METHODOLOGY**

#### **2.1 Study Design And Setting**

This research was carried out in the city of Ternopil, which is in the western part of Ukraine, between September 2019, and May 2019 .

In accordance to the previously stated objectives, both qualitative and quantitative data methodologies were applied. In this study, qualitative methods were implemented to assess and describe students attitude to family planning and modern contraceptives and also to assess sexual behavior while quantitative methods were applied to assess knowledge and practice, as well as superficial attitudes towards family planning .

Two universities were involved, both medical universities and non-medical universities. The Ternopil National Medical University (TNMU), Ternopil National Economic University, Ternopil National Technical University and a few other universities. Emphasis were laid on the Ternopil National Medical University because of its huge population of foreign students.

A cross sectional descriptive study approach was incorporated to respectively assess and describe the knowledge, attitudes and behaviors of foreign students in Ukraine in relation to Family Planning and Modern Contraceptives. In this study, qualitative and quantitative study methodologies were used in accordance to the objectives of the study whereby the qualitative methods were applied to assess and describe students attitudes towards family planning, sexual norms and sexual behaviors, and to analyze areas needed for further education and recommendations, while the quantitative parts assisted in assessing knowledge and practice and as well as attitudes of these foreign students in regards to family planning and modern contraceptives. This study was kicked off with a few unstructured interviews with

students from different universities in Ukraine. These interviews were employed to explore the superficial and deep knowledge, attitude and practices of the foreign students and to fully depict their reasons behind their sexual behaviors and choice of family planning and contraceptive methods.

A quantitative part was applied also which assesses level of knowledge , attitude and different practices of the different students from the previously mentioned medical and non-medical universities and to provide appropriate results in regards to the subject.

## **2.2 Study Population, Sampling And Data Collection**

**Interviews.** To be able to accomplish the purpose of identifying different sexual behaviors and norms, knowledge, attitude and practice of family planning and modern contraceptive, and to assess choices and different barriers to various contraceptive methods and family planning services among foreign students in Ukraine, eight in-depth interviews were conducted with foreign university students in the city of Ternopil which is located in the western part of Ukraine. Participating students were from the universities in Ternopil which are the Ternopil National Medical University, Ternopil National Technical University and the Ternopil National Economics University. Three students were interviewed from the medical university and the rest from the other participating universities. A convenience sampling technique was utilized to select students for the qualitative part of the study to get students who can be easily accessed. Also, a snowball sampling technique was used in this study whereby who were interviewed assisted in recruiting other participants within their reach. These interviews were performed in English Language. With the aid of an assistant female interviewer, females were able to be interviewed regardless of the sensitivity of the topic. Two of the interviews were held via telephone and the others were held face to face. Telephone interviews were preferred by students who were not available to meet for a face to face interviews. The interviews were unstructured which

gave room for a free flowing and comfortable conversation , digging deep into attitudes and various behaviors. Interviews were recorded with an audio recording device and were transcribed carefully for further data analysis. The inclusion criteria were as follows:

1. Age groups between 15 and 35 years .
2. English speaking
3. Students of either of the universities in Ternopil
4. Willingness to participate
5. Sexually active participants

The exclusion criteria were as follows :

1. Sexually inactive participants
2. Students who refuse to give consent

Before the interview, students privacy and confidentiality was promised to create a conducive environment. Each interview lasted for a duration of 20 to 30 minutes where questions regarding knowledge, attitude, practice, risky sexual habits and risky sexual behaviors were asked. Also, questions regarding choice of family planning and contraceptives. Specific questions regarding perception of emergency contraceptives were asked. Sensitive questions were asked, received and answered properly by the participants. After the interviews, a good saturation of the ideas were attained. Also, educative materials and recommendations were given out in printed form to participants based on the World Health Organizations details on family planning and contraception. Students who had misconceptions and had questions were answered medically by the interviewer.

**Survey.** For the assessment of the students level of knowledge , attitudes, practices and different sexual behaviors towards family planning and different modern contraceptive methods, students were welcomed to participate in an online survey. The survey was shared and distributed through WhatsApp messenger, Facebook, telegram, electronic mails. A probability sampling with a simple randomized approach was

incorporated. A sample size of 188 was calculated to be retrieved, however due to the sensitivity of the topic regardless of its anonymity, a total of 78 responses were received from the participants based on the online survey based on volunteer sampling. Participating students who volunteered completed a structured online questionnaire which was distributed between November, 2019 and January, 2020 through WhatsApp messengers and Facebook messengers mainly. Also, a more effective channel was the various student chat groups. The online survey was made anonymous and was constructed on Google forms.

English language was used in creating the questionnaire. It took approximately 5 minutes for the questionnaire to be completed by the participants. The motives on which the research was based which is assessment of the knowledge, attitude and practice of family planning and different contraceptive methods were stated in the beginning part of the questionnaire. The survey was piloted among 10 students from the medical, technical and eco universities in the city of Ternopil, Ukraine to assess the quality and comprehension of the questionnaire. There were four sectional divisions of the questionnaire. It was divided as the first part retrieving socio-demographic data, second part retrieving data on the knowledge, third part of attitudes, and fourth part on practice on family planning and different contraceptive methods and a total number of 34 questions were asked in the survey. The first part of the questionnaire which was from question one to seven asked questions about age, gender, country of origin, marital status, religion, year of study and university of study. The second part assessing knowledge was from questions eight to sixteen. Questions were asked to assess the generalized knowledge on contraception and to explore if students could identify and differentiate different types of contraceptives. Questions were mixed with options Yes/No/Not sure/Maybe and options with multiple choice. The third part assessing attitudes of the participants to family planning and modern contraceptive methods were from questions seventeen to twenty one. Questions on attitudes were aimed to understand different past, present and future scenarios like perception and plans to utilize family planning which may affect practice and choice on family planning and contraceptive. The fourth part assessed practice of family planning and contraceptive

and was from questions twenty two to thirty four. Sensitive questions about risky sexual behaviors , sexual history, preference on contraceptives and specific questions on emergency contraceptives were asked. The last question was about the most preferred used contraceptive.

78 responses were received in the survey. Out of the 78 responses recorded, 49 were females and 29 were males. Participants were dominantly from African countries with a number of 30 respondents from Nigeria , 13 respondents from Ghana, 11 respondents from Zambia, 10 from India, 4 respondents from Zimbabwe, 2 respondents each from Tanzania, Kenya and Democratic Republic Of Congo , 1 respondent from Namibia, 1 respondent from Uganda and 1 respondent each from the rest of the participants from Micronesia and Afghanistan. The range in age of the participants was from 18 to 31. Most of the respondent were from the Ternopil National Medical University with a number of 55 participants and 9 from the Ternopil National Economics University and the rest were from other universities. The participants ranged from the 1<sup>st</sup> year of study till the 6<sup>th</sup> year of study, with the highest participation coming from the second year of study with a number of 25 participants, only 3 participants from the first year of study, 17 participants from the third year of study, 10 participants from the fourth year of study, 10 participants from the fifth year of study and 13 participants from the sixth year of study. Out of the 78 participants, 49 reported to be single, 27 reported to be in a relationship and 2 reported to be married.

### **2.3 Data Quality Assurance And Ethical Analysis**

Informed consent from the participants of the interviews were received prior to the interviews, also, participants were guaranteed of their anonymity, confidentiality and interviews were carried out on voluntary basis (Kistnasamy, Reddy, & Jordaan, 2009). Students filled the questionnaires voluntarily.

The combination of the interviews and the survey was helpful in reducing bias . Students were briefed on the topic prior to the interviews also. By using in depth

interviews, assessing knowledge, attitudes and practice of family planning and contraceptive enhanced the validity of the study performed.

The questionnaires were pre tested among 10 students from the Ternopil National Medical University, Ternopil National Economic University and the Ternopil National Technical University. This was performed to recognize mutual comprehension among the students of these universities. Students had privacy while filling the survey which in turn could improve accuracy. Interviews were based on convenience and a snowball technique was incorporated.

## **2.4 Data Analysis**

The qualitative part of the study had interviews were carried out in the city of Ternopil which is located in the western part of Ukraine. Most of the interviews were face to face and a few were carried out via telephone . Interviews were recorded using an audio recording device and listened to carefully over time to understand the responses received. The interviews were transcribed using English language. The transcripts were assessed and studied multiple times to get familiar with the texts and were further grouped into main ideas and themes. Based on similarities, basic themes were merged, coded and grouped together to develop a more globalized theme. Analysis were based on the documentation of these themes and ideas.

The quantitative part of the study had a survey of 34 questions which was created using Google forms. Results were exported using a google spreadsheet format and was imported into Microsoft Excel and was analyzed and summarized with tables on Microsoft Word. Summaries were given in percentages and frequencies. Results were analyzed further and represented by simple descriptive statistics in form of pie charts and bar charts.

## **2.5 Strength And Limitations**

During the course of the study, certain limitations were stumbled upon. Based on the interviews, it was difficult getting students to participate in the interviews face to face and that was because of the timing the interviews were carried out. Interviews were carried out in mainly in December, 2019 which was the end of the first semester and as well as the examination period for the students. It was difficult to get their attention and for those whose attention was gotten, it was difficult for them to have a free time to participate in the interviews

Since this study is mainly targeted towards sexually active students, biases were minimized by informing students prior to the interview and survey about the purpose of the study and their participation being voluntary. Confidentiality and anonymity of the participants was preserved.

There was low response in the survey and that was a huge limitation as more responses were expected from the questionnaires online. Unexpected results from other universities across Ukraine were received . Students could have searched answers to the questionnaire relating to the knowledge part while filling in the answers which may not really give direct honest answers from the participants.

## PART 3

### **3.1 Awareness, Knowledge, Attitude and Practice of foreign students towards Family Planning and contraception : In-depth interview results**

Series of in-depth interviews were conducted with a total number of 7 students based on convenience. These students were 5 females and 2 males ranging from 19 to 33 years old with an average of 26 years. The students who participated were undergraduate students from the Ternopil National Medical University, Ternopil National Technical University and the Ternopil National Economic University. Four out of the seven students were from Nigeria, one from Zambia, one from the Democratic Republic Of Congo and one student from Ghana.

In the interviews, the discussions started with questions regarding their awareness, and knowledge to family planning and contraception were asked. All the students admitted to hearing about family planning and contraception and having a knowledge about it. They responded to the question asking if they had heard about family planning and contraceptive with “*Yes, I have* ” and two student did not just admit to hearing about family planning and contraception, but the students admitted to not caring much about it initially, one of the participants said, “*Yes I was taught a little bit in high school but I have not thought about it lately because I feel I do not need it now*” and another participant said, “*Yes I have, but then I was not so involved because I was not interested because I was not in a relationship then but I can still remember a few things we were taught then.*” To access the knowledge, participants were asked what they knew about family planning, and definitions given by the participants were ranged from fundamental to comprehensive. One of the students who was interviewed via an audio call responded, “*It is a social activity which enables individuals including minors and adults to determine the number of children they wish to have and the spacing. I am sorry I just checked it up now. I know what it is in my head but I cannot explain.*”

” Another student responded, “ *I have a basic knowledge about family planning, I think it is about the number of children a parent is supposed to have, something like that* ” . Most of the participants had just basic knowledge of family planning, a participant said, “ *It is the prevention of pregnancy and disease,* ” while another said, “ *it is the idea of teaching people when to and when not to have babies* ” Some participants had a more preferable definition of family planning. A participant said, “ *As the name suggests, I understand it to be planning a family and how many kids you want to have , when you want to have it and the distance between them .I just have a surface knowledge about it . I am not planning a family anytime soon so I have not looked deep into it* ” while another participant said, “ *family planning helps to prevent unplanned pregnancies and. Also help you to decide on the number of children you want to have.* ” All the participants had an idea of what contraceptives really are, where one had this to say, “ *Contraceptive is kind of a medium of depriving on from getting pregnant during sexual intercourse* ” When asked about contraceptives, all the students agreed to its importance and benefits. One of the participants said, “ *it is necessary and I feel it is an obligation to be aware especially when you are in a relationship because once you are not informed, you may be getting pregnant every year* ” and another student said, “ *Basically, I think the purpose of contraceptives is not to get pregnant during sexual intercourse, so I think it depends on the individuals and the reason why they want to use contraceptives. If it will be beneficial, if they think that they have had enough children and they do not want more children, then I think it will be beneficial but if they want to get pregnant and want to have children, I do not think that it would be beneficial using contraceptive.* ” Most students answered “no” when asked if they knew the difference between modern and traditional types of contraceptives.

Furthermore, two of the participants had very detailed knowledge on the classification of contraceptives and were able to identify a few kinds. One of the two students said, “ *I know the modern ones such as the use of condoms, Intra uterine devices(IUD), hormonal contraceptives and also I know about the traditional methods such as withdrawal method and the use of calendar.* ” The second student had this to say about different kinds of contraceptive: “ *I know of condoms, oral contraception,*

*patch, sterilization, implants and the calendar method.*” The rest of the students had superficial knowledge about types of contraceptives where one of them only knew about pills, however, most of the students had one type in common which they knew and it is the use of condoms. A student said, *“I do not really know much but I know about the pills and that was when I had my first child, like six years ago and the doctor prescribed it to me after I gave birth.”* Another student said, *“ Yes I do know one or two, i know about plan B which a drug, I am not sure about condom but I think it is part of it. That’s all I know”*

Specific questions to assess knowledge based on emergency contraceptives were asked because of its relevance in the study, and amazingly, all the participants knew about emergency contraceptives and all participants thought it is preferable not to be used regularly. One of the respondents said , *“It is not safe to be taken regularly. Also, it is very expensive to be compared to monthly pills. If you have a sexual life, I do not think it is safe to use emergency pills every time. I think you should discuss with the doctor and find another method.”* Another respondent who is a medical student had a very detailed response on emergency contraceptive, he said, *“ First of all, all medications have side effect, so based on my knowledge as a medical student, I think one of the side effects of emergency contraceptive is high blood pressure, so it is a contraindication to use, people with high blood pressure should not use it and also, continuous usage can lead to maybe tumor, cancer, I think this is a side effect of continuous usage, although continuous usage of drugs have side effects. I will not advice anybody to use that and it should not be used regularly”*

The students felt that it is very important and necessary to be informed about family planning and contraceptives. One of the students felt it is important to be informed because most people have unprotected and sex and it is essential to avoid future unwanted pregnancies. Another student said, *“ It is necessary and I feel it is an obligation to be aware especially when you are in a relationship because once you are not informed, you may be getting pregnant every year.”* Two of the respondents had a positive responses when asked about the need to discuss about family planning and contraceptives with their respective partners, one of them said she discusses family

planning with her partner and emphasized on how important it is for both the male and the female to be involved. However, the rest of the respondents collectively do not engage in discussions on family planning and contraceptive with their partners. One of the respondents said, *“we haven’t discussed about it, but I know he just carries the condoms around”* Another respondent said, *“I have never discussed the issue of family planning with my partner as i do not find it an important topic yet.”* Generally, the students felt they were not able to discuss about family planning with their parents especially as teenagers because of fear. A student said, *“Well, I did not discuss with my parents. They were strict about a lot of things. As the boy and as the first son in the house , you are always expected to set example for your younger ones. They were strict in a lot of sense and I could not have possibly wanted a discussion with them.”* A second student said, *“I did not grow up with my mother, I grew up with my father and my step mother. I did not have such conversations with my father . You know in Africa for example, it is almost like a taboo to talk about it . But I discussed it with my older cousins. So I just did my own research, talking with friends and finding information on the internet.”*

The students claimed to have had their first sexual experience between the ages of 14 to 20. Respondents with children claimed to have only commenced active and steady usage of contraceptives only after child birth and they use the hormonal oral contraceptive. One of the respondents said, *“I was prescribed by my doctor after my second birth and that is because I had very difficult pregnancies. Actually I had placenta previa. So my doctor told me that I should not get pregnant for the next 5 years . so to prevent pregnancies she prescribed me those pills.”* The second student said, *“I am on pills now and I started using them after I gave birth. It was prescribed by my doctor”*. The rest of the students used between barrier contraceptive(condoms), withdrawal method and emergency contraceptive of which majority preferred withdrawal and used less of condoms. One of the students claimed to use condoms because of trust issues she had for her partner while another student said, *“I use more of withdrawal method because I don’t like wearing condoms .”* Generally, the students felt that condoms limit pleasure during sexual intercourse and by that they use more

withdrawal. One of them said, *“I do not use condoms because I do not enjoy the sex, and secondly it is very tight and it is uncomfortable.”* All the students agreed to having at least one or two pregnancy scares with the definition: a situation whereby they have the suspicion of pregnancy or they have the fear that they got a girl pregnant. Most of the students also agreed to the pregnancy scare having an effect on their behaviors and decisions. One of the students had this to say: *“Yes, the scare did affected my decision, as i only agreed to stop the withdrawal method to use condoms for a while.”*

### **3.2 Exposure Of Foreign Students On Family Planning And Modern Contraceptive Use: Discoveries From The Online Survey.**

The age group 22 to 25 years had the highest respondents representing 43.6% of the total respondents. 62.8% were females and 37.2% were males. Participants hailed from different countries with 38.5% coming from the Federal Republic of Nigeria. Majority of the students were from the majority of the students, 66.7%, were from the Ternopil National Medical Univeristy and also most students in the study were in the first and second year of study representing 35.9% of the participants. The study revealed that most participating students were single according to their marital status representing 62.8% of the respondents

#### **Knowledge**

In this study, of all of the participating students, 92.3% were surveyed to have heard generally about family planning and contraceptives. About modern methods contraceptives, 75.6% of the participants had heard about it. 53.8% of the participants had heard about traditional methods of contraceptives and 83.3% had heard about emergency contraceptives.

75.6% of the participating students could recognize modern contraceptives among other methods. 76.9% of the respondents could differentiate hormonal contraceptives

from other methods of modern and traditional contraceptives. 74.4% of the respondents could recognize barrier contraceptives from various variants of modern and traditional contraceptives.

Regarding emergency contraceptives, 66.7% of the respondents had knowledge on the advised usage. Also, 39.7% had knowledge that emergency contraceptives are somewhat unsafe to the female health when in regular use. 26.9% of the respondents identified schools as the main source of their information on family planning and contraceptives while 25.6% identified health personnel and hospitals as another source and 19.2% identified the internet as one of their sources.

*Table 1* Socio-demographic characteristics of the respondents (N=78)

Characteristic	Categories	N	%
Age	18-21 years	29	37.2
	22-25 years	34	43.6
	26 years and older	12	15.4
	missing	3	3.8
Sex	Female	49	62.8
	Male	29	37.2
Country of origin	Nigeria	30	38.5
	Ghana	13	16.7
	Zambia	11	14.1

	India	10	12.8
	Other <sup>1</sup>	14	18.1
Religion	Christian Protestant (including Anglican and Baptist)	27	34.6
	Christian Orthodox	16	20.5
	Christian Catholic (including Roman Catholics)	11	14.1
	Other Christian <sup>2</sup>	6	7.8
	Hindu	9	11.5
	Muslim	7	9.0
	Missing	2	2.6
University	Ternopil National Medical University	55	66.7
	Other	23	33.5
Year of study	1-2 <sup>3</sup>	28	35.9
	3-4	27	34.6
	5-6	23	29.5
Marital status	Married	2	2.6

	In relationship	27	34.6
	Single	49	62.8

<sup>1</sup> “Other” included Zimbabwe (4 respondents), Democratic Republic of the Congo, Kenya and Tanzania (2 respondents each), Afghanistan, Micronesia, Namibia, Uganda(one person from each country).

<sup>2</sup> Including Pentecostal (2), Jehovah's witness (1), nondenominational (1) and not defined (2).

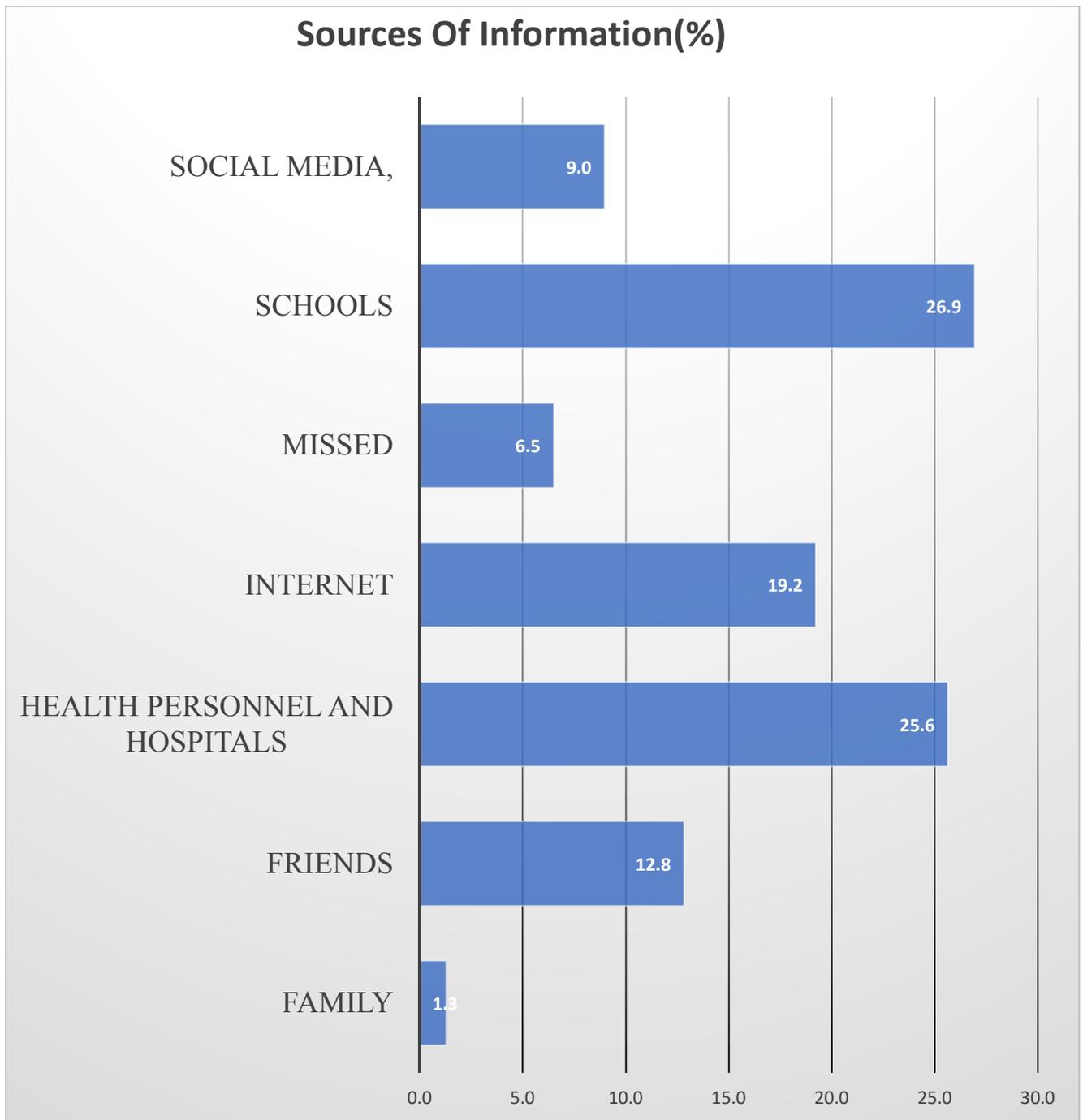
<sup>3</sup> Most of the respondents were on the second year of studying (N=25), and only 3 – on the first.

*Table 2 Knowledge about Family Planning And Contraceptive (N=78)*

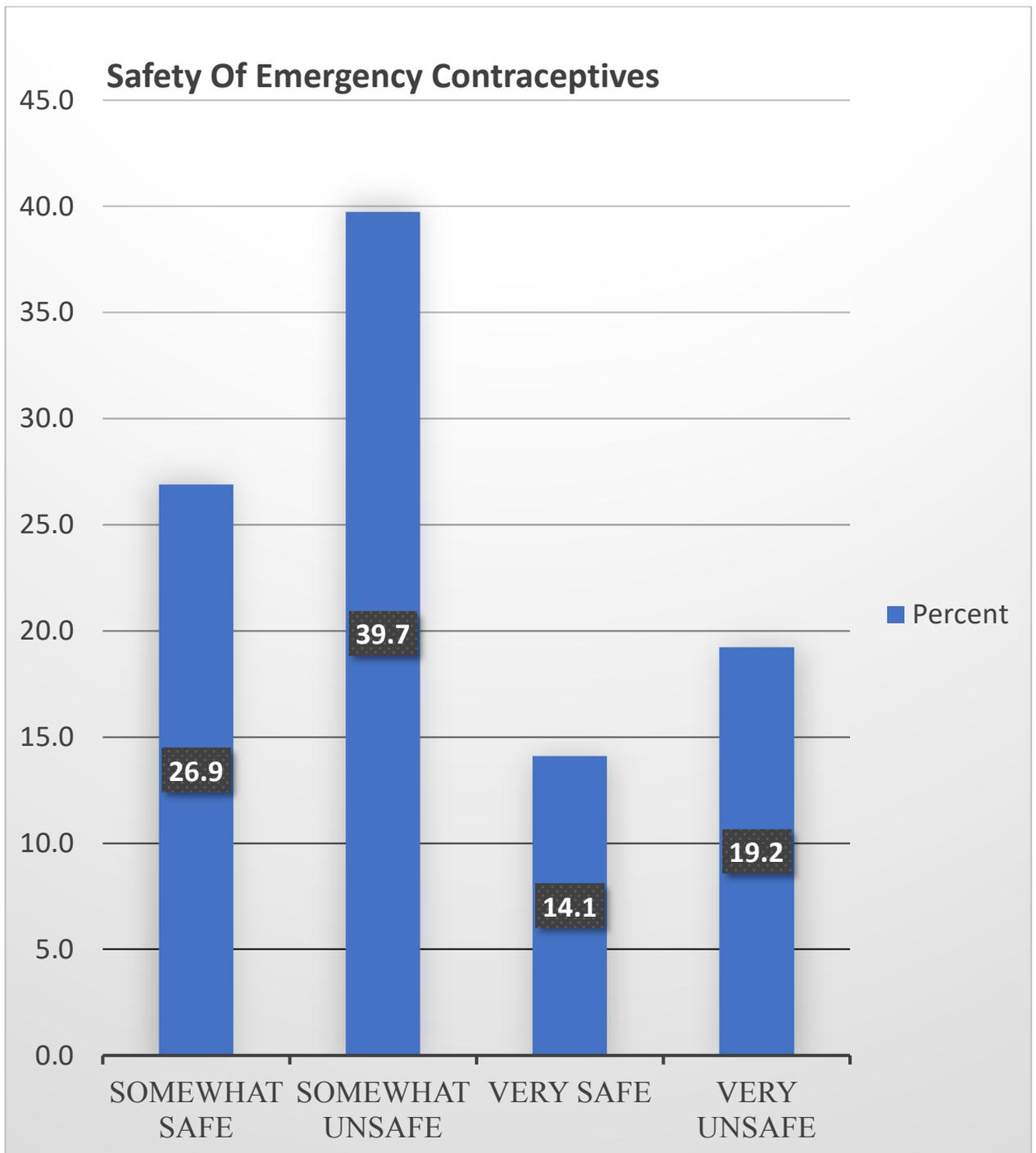
Family Planning and Contraceptives		N	%
Ever heard about family planning / contraceptives		72	92.3
Ever heard about	Modern contraceptive methods	59	75.6
	Traditional contraceptive methods	42	53.8
	Emergency contraceptive	65	83.3
Can correctly recognize	Modern contraceptive method	59	75.6

	Hormonal contraceptive method	60	76.9
	Barrier contraceptive method	58	74.4
	Traditional contraceptive method	62	79.5
Ever been informed		73	93.6
Ever made a research		52	66.7

*Table 2* shows some results from the assessment of levels of knowledge of family planning and contraceptives.



**Figure 2** represents results identifying main sources of information in regards to family planning and contraceptives in percent (N=78)



**Figure 3** depicts results based on ideologies concerning the safety of emergency contraceptives with the highest percentage of 39.7 which represents emergency contraceptives as somewhat unsafe.

## **Attitudes Of Foreign Students To Family Planning And Modern Contraceptives.**

Majority of the participants thought family planning and especially modern contraceptives as being beneficial with 88.5% of the respondents agreeing to that. 98.7% of the participating students felt it is very important to be informed about family planning.

Generally, 89.7% of the students have positive attitudes in regards to the adoption of family planning in the future. A total of 75.6% of the respondents have plans to use modern contraceptives in the future.

Attitudes in general, were discovered to be positive, especially with thoughts on how beneficial family planning is and plans to adopt family planning and contraceptive in the future.

*Table 3 Attitudes to Family Planning And Contraceptives (N= 78)*

Attitudes	Frequency	Valid Percent
Beneficial	69	88.5
Importance To Be Informed	77	98.7
Adopting Family Planning In The Future	70	89.7
Plans To Use Modern	59	75.6

Contraceptive In The Future		
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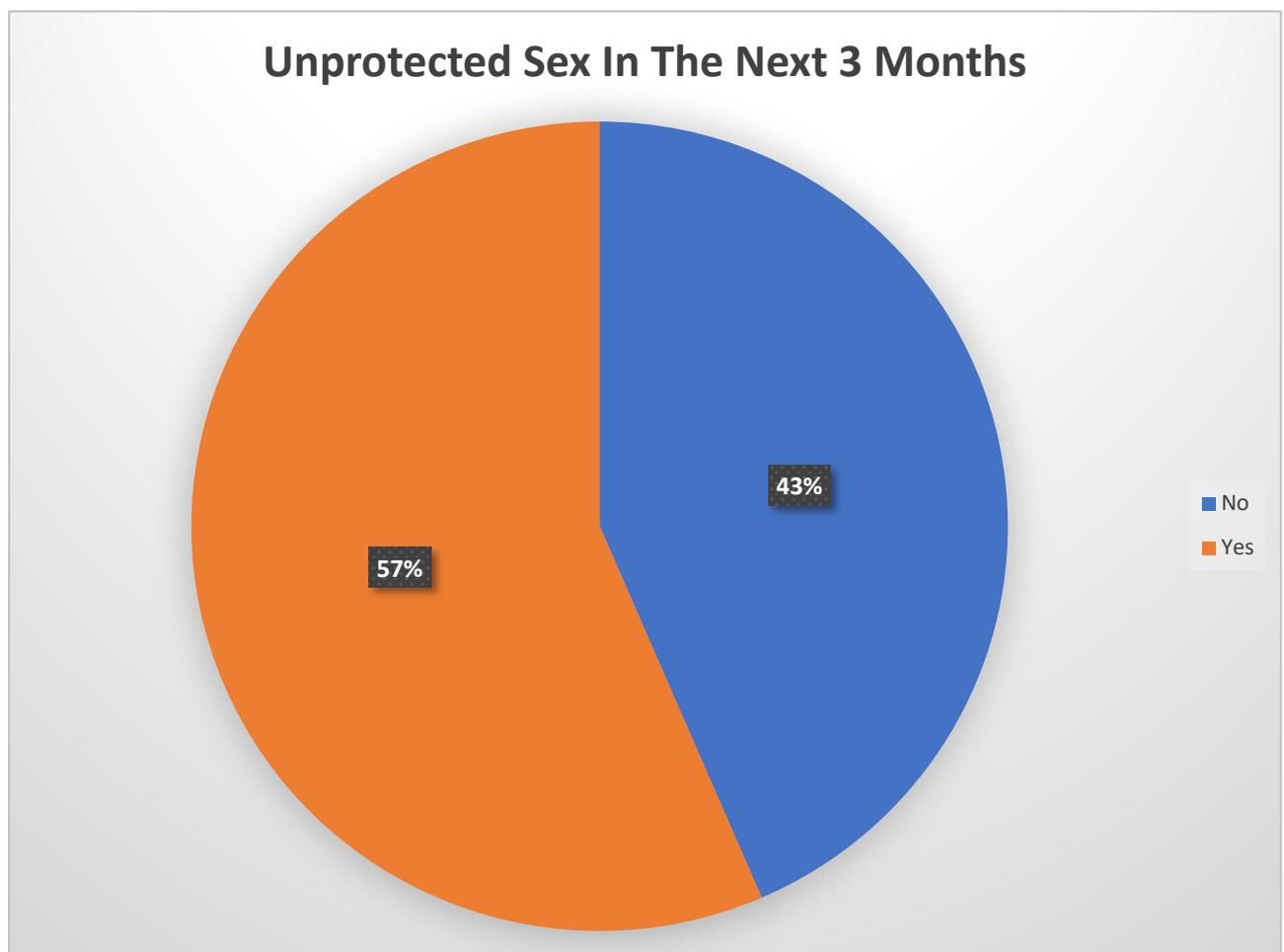
*Table 3* explains different attitudes to family planning and contraceptives which includes how beneficial respondents think it is, how important they think it is to be informed, plans to adopt in the future and plans to use modern contraceptives in the future. (N=78)

*Table 4* Answers the question do you think you would adopt family planning in the future?

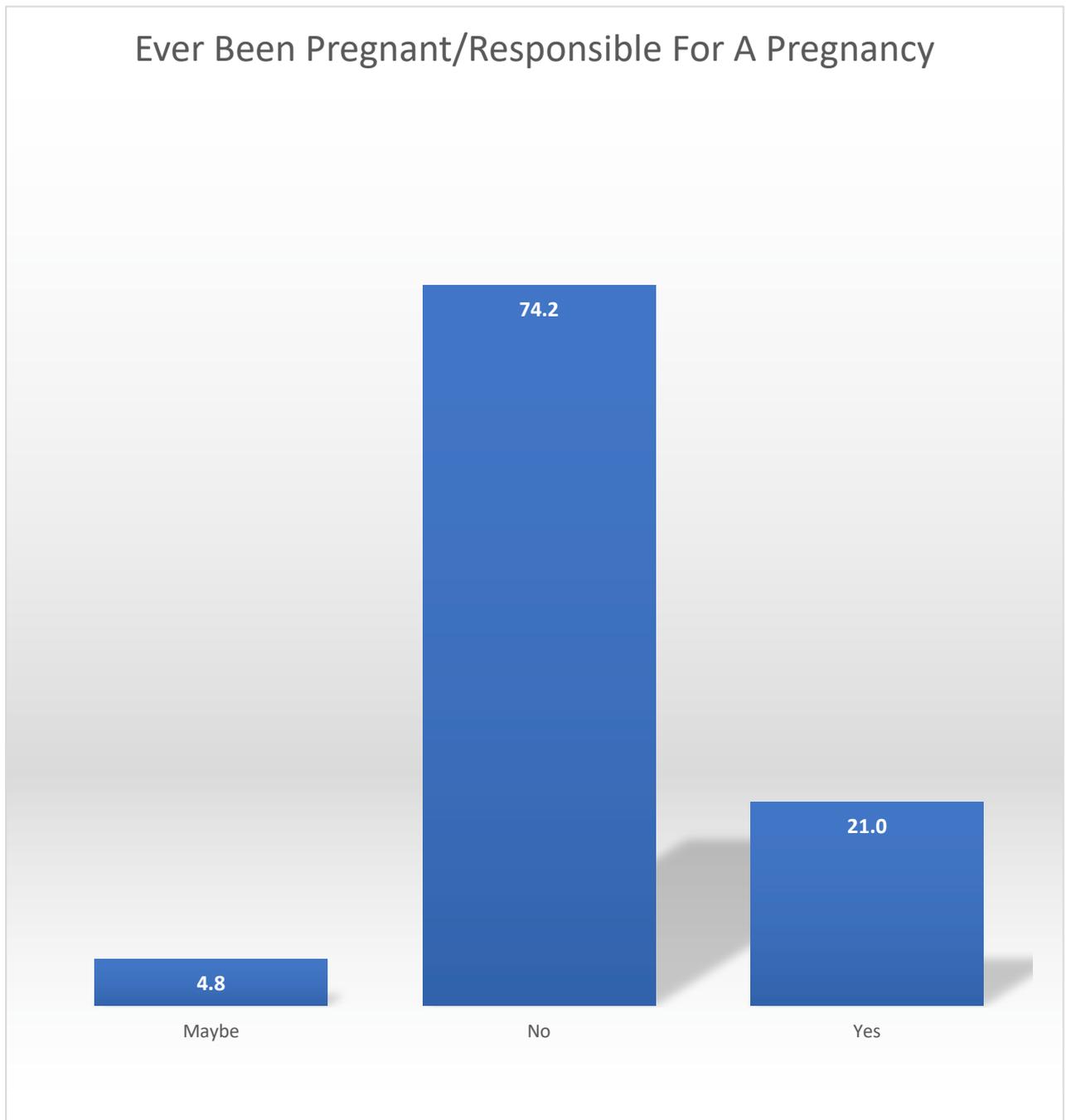
	Frequency	Percent	Valid Percent	Cumulative Percent
No	3	3.8	3.8	3.8
Not sure	5	6.4	6.4	10.3
Yes	70	89.7	89.7	100.0
Total	78	100.0	100.0	

Attitudes of the sexually active participating students showed that of all sexually active respondents, 51.6% had sometime experienced a pregnancy scare. 74.2% disagreed to ever being pregnant or to ever getting a female pregnant while 21% agreed to being pregnant or at some point got a female pregnant. Unfortunately, 4.8% were not certain if they had or if they had not.

About discussion on family planning and contraceptive, 50% of the sexually active participants agreed to having such discussions with their various partners. 56.5% of these respondents owned up to the likelihood of engaging in unprotected sexual activities in the next 3 months.



**Figure 4** represents in percentage, number of respondents who owned up to the possibility of having unprotected sexual activities in the next 3 months. (N=62)



**Figure 5** represents in percentage, number of sexually active respondents who have at some time been pregnant or who have at some point in their lives been responsible for a pregnancy. (N=62)

### **Practice Of Family Planning And Contraceptives Of Foreign Students In Ukraine**

Firstly, age at initial sex exposure ranged from 10 to 27 years old with an average of 19 years. Sexually experienced students were analyzed. 74.2% of the respondents reported to have used a modern contraceptive method at some point while 53.2% of the respondents had used a traditional contraceptive method at some point in their sexual lives and 50% reported to have ever used emergency contraceptive methods.

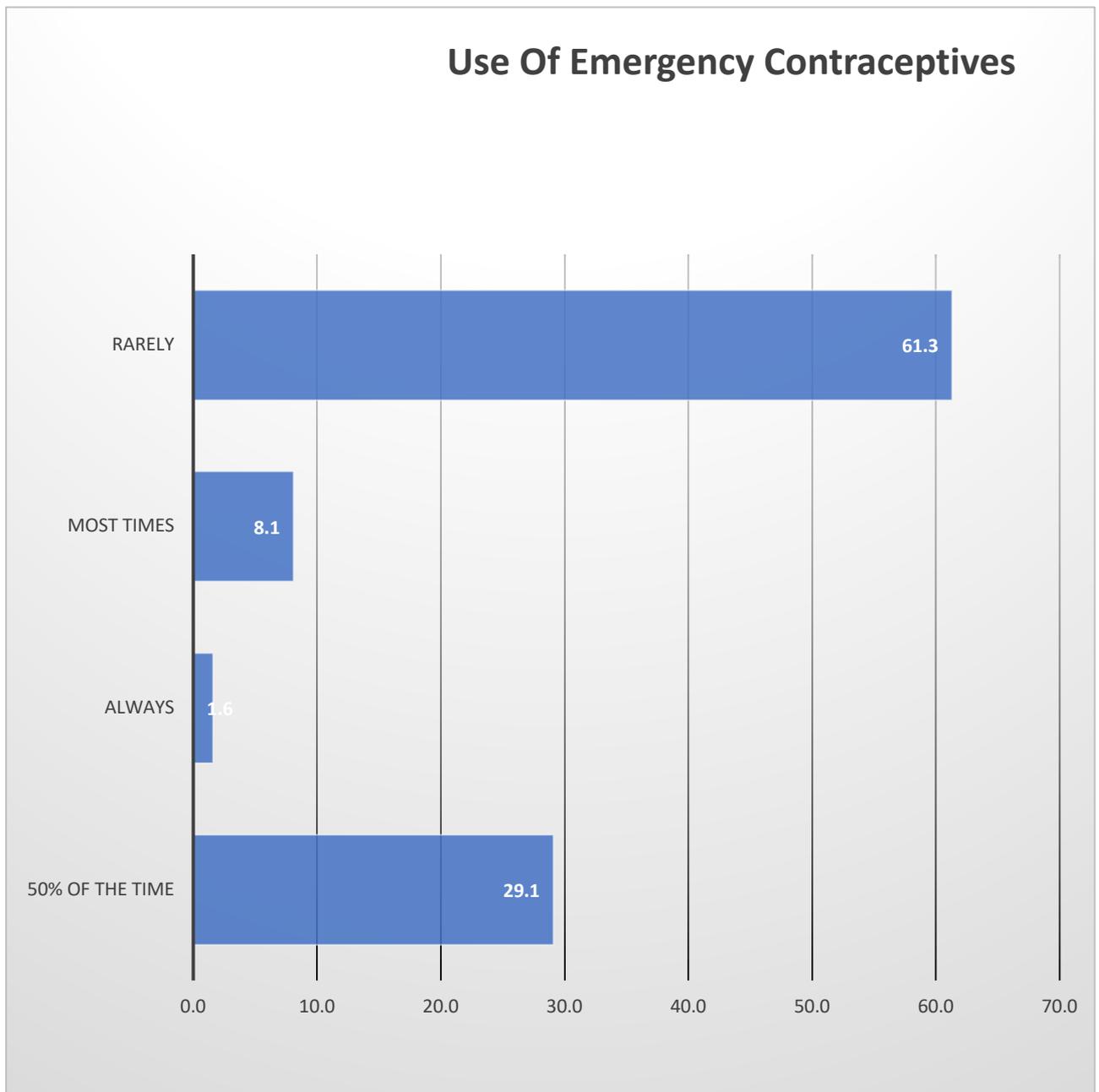
A total of 23 of 62 students reported to have been using a contraceptive method at the time which the survey was carried out. Out of the 62 respondents , 38.7% reported to be using the barrier methods of modern contraceptives which includes male condoms, female condoms and diaphragms. 43.6% of the sexual experienced students used modern contraceptives because they felt it is more efficient.

In periods of sexual activeness, 32.3% of the respondents reported to always use a form of contraceptives however, 72.6% of the respondents reported not to have used any form contraceptive in the last 3 months given at the point the survey was carried out. About emergency contraceptives, 61.3% of the sexually experienced respondents answered that they rarely use this form of contraceptive.

**Table 5 Use of Family Planning And Contraceptive (among sexually experienced, N = 62)**

Family Planning And Contraceptives	Method	Frequency	Percent
Ever used	Modern contraceptive method	46	74.2
	Traditional contraceptive method	33	53.2
	Emergency contraceptive method	31	50.0
Currently using	Total	23	37
Most preferred used contraceptive method?	Barrier	24	38.7
	Variant		
How often do you use contraceptive during periods of sexual activeness?	Always	20	32.3
Have you been consistent in contraceptive usage in the past 3 months?	No	45	72.6

Table 5 represents basic questions about usage of family planning and contraceptives among foreign students. Usage of modern, traditional and specifically emergency contraceptives were assessed. Consistency was assessed. (N=62)



**Figure 6** delineates usage of emergency contraceptives among sexually experienced respondents. With the most dominant response being “rarely”

*Table 6* Answers the question what is your most preferred used contraceptive method?

Variant	Frequency	Percent	Valid Percent	Cumulative Percent
Barrier	24	38.7	38.7	38.7
Basal Body Temperature Method	1	1.6	1.6	40.3
Calendar Method	5	8.1	8.1	48.4
Hormonal	16	25.8	25.8	74.2
Surgical	1	1.6	1.6	75.8
Withdrawal Method	15	24.2	24.2	100.0
Total	62	100.0	100.0	

*Table 6* outlines various kinds of contraceptives methods and most preferred among foreign students in Ukraine. Barrier methods were the most preferred with a percentage of 38.7

*Table 7* Answers the question reasons for using modern contraceptives

Reasons		Frequency	Percent	Valid Percent
	Affordable	5	8.1	8.1
	Due to Duration of usage	3	4.8	4.8
	Less side effects	11	17.7	17.7
	More efficient	27	43.6	43.6
	Readily available	16	25.8	25.8
	Total	62	100.0	100.0

*Table 7* shows reasons why students utilize modern contraceptives with the idea of being more efficient taking the lead with 43.6% and readily available with 25.8%

Table 8 Age at first sex

Age	Frequency	Percent	Valid Percent	Cumulative Percent
10	1	1.6	1.6	1.6
13	1	1.6	1.6	3.2
14	1	1.6	1.6	4.8
15	2	3.2	3.2	8.1
16	1	1.6	1.6	9.7
17	9	14.5	14.5	24.2
18	15	24.2	24.2	48.4
19	8	12.9	12.9	61.3
20	13	21.0	21.0	82.3
21	5	8.1	8.1	90.3
22	2	3.2	3.2	93.5
23	1	1.6	1.6	95.2
24	1	1.6	1.6	96.8
26	1	1.6	1.6	98.4

27	1	1.6	1.6	100.0
Total	62	100.0	100.0	

*Table 8* represents responds to the question Age at first sex. Ranging from 10 to 27 years of age , with an average of 19 . (N=62)

## DISCUSSIONS

The assessment of the knowledge, attitude and practice of different contraceptives among young adults have been carried out in various studies across the world with most young people having a high level of awareness and knowledge (Renjhen, Kumar, Pattanshetty, Sagir, & Samarasinghe, 2010)

In this study, we assessed knowledge, attitudes and practices of family planning and modern contraceptives including parental influences and risky sexual behaviors. Students were seen to have a very general knowledge about family planning and contraceptives. Most students had basic awareness of contraceptives. 92.3% had heard about family planning and contraceptives, above 75% had heard about modern contraceptives and emergency contraceptives respectively. At least, above 75% of the students could correctly identify and differentiate modern, hormonal, barrier and traditional contraceptive when mixed up with different other kinds of contraceptives. The main source of information of family planning and contraceptive among students in this study was explored to be schools with 26.9% of the students having that as their choice. The next main source of information was hospitals and healthcare personnel which was 25.6% of the students. Most students based on the in-depth interviews carried out, had very basic knowledge about family planning. They had the general idea about contraceptives being for birth spacing and preventing pregnancy. A more structured and detailed response would have been more preferable. Most medical students were seen to possess greater knowledge of family planning and contraceptives in comparison with students from other disciplines.

These findings countered the hypothesis which states “Foreign students in Ukraine have little or no knowledge about family planning and modern contraceptives” and “Students will not know different types of contraceptives” Other researches carried out had similar findings to this study. In a study conducted on about 156 students in India, 98% (above 75%) of the students had knowledge on contraceptive and students thought contraceptives were also for pregnancy prevention and spacing of births. Most

of the sources of information were schools, health personnel and the media with the media playing the more dominant role in sharing information and awareness (Renjhen, Kumar, Pattanshetty, Sagir, & Samarasinghe, 2010). Also, in a cross sectional study carried out in Tanzania, where all the respondents had heard about family planning and contraceptives and with most of the sources of information being schools, friends and media. In this study carried out in Tanzania, it was discovered that medical students had greater knowledge than students from other fields (Somba, Mbonile, Obure, & Mahande, 2014) and also as seen in a study (simionescu, horobet & belascu, 2017)

In general, based on the survey, students had very positive attitudes towards family planning and modern contraceptives. 88.5% of the students thought family planning and contraceptives are beneficial to individuals and the general population. In this study, above 75% of the students all had positive attitudes to the importance of information sharing and receiving on family planning and contraceptive, plans to adopt a family planning method in the future and plans to utilize specifically modern contraceptives in the future. Among the sexually experienced students, pregnancy scares were identified in 51.6% of the students, 21% agreed to being pregnant or being responsible for a pregnancy at some time in their lives while 74.2% disagreed to that. Half of the sexually active respondents agreed to having discussions about contraceptives with their partners. Unfortunately, 56.5% of the sexually active respondents agreed to the probability of engaging in unprotected sexual activities in the next 3 months from when the study was carried out. Based on the in-depth interviews, Most respondents were reported not to actively engage in family planning discussions with their partners. Also, parental upbringing was seen to be a remarkable factor where students admitted to never discussing family planning and contraceptives with their parents especially in African homes. These students mentioned it to be a kind of taboo to have such discussions with their parents. Stigma can be associated with such attitudes. Most students picked up positive attitudes from schools and by discussions with friends.

Age at first sex was identified to range from 10 to 27 years with an average of 19 years based on the survey. Out of the sexually experienced students surveyed, 74.2%

were reported to have use modern contraceptives , 53.2% were reported to have used traditional methods at some point in their lives and 50% reported to have used emergency contraceptives. Analytically, 38.7% were using mainly barrier methods of contraceptive as of when the survey was carried out. 72.6% of the students were reported not to have used any contraceptive in the last three months. In regards to emergency contraceptives, majority of the students (61.3%) of the sexually active respondents were reported to rarely use EC. In this study, 37% of the sexually experienced students were reported to be currently using a type of contraceptive where the most preferred used method of family planning and contraceptive among the foreign students was condoms. Based on the in-depth interviews, students engaged in a lot of risky sexual behaviors. Students felt condoms were limiting their sexual pleasure and in most cases they combined condoms and withdrawal methods of which most of them had pregnancy scares which in return had huge effects on their decisions to either withdraw or use condoms.

Findings made in this research were similar to other studies where related results were attained. In a study held in Tanzania (Somba, Mbonile, Obure, & Mahande, 2014) most of the sexual experienced participant were reported to have condoms as their most preferred contraceptive. The ever used rate was 58.5% which in comparison was lower than our rates. However, 41.5% of the respondents were currently using a form of contraceptive which was slightly higher than our rate being 37%. Relatively, in another study carried out in Ghana, similar results were drawn. Only 17.8% of the sexually active respondents used contraceptives. This is a low rate which implies that being aware or having a good level of knowledge in regards to family planning and contraceptive does not automatically interpret the use of contraceptives. Students may be aware but yet have very low usage rates as seen in the study (Hagan & Buxton, 2012).

With most students having first sexual intercourse with an average age of 19, parental guidance should be advised, however, most students are not very comfortable discussing such topics with their parents and may rather seek validation from friends

which in turn may have myths about contraceptives, as seen in a study where topics like family planning and contraceptives and general sex education were referred to as taboo subjects especially in African homes (Hagan & Buxton, 2012). Also, just like in our study, the high rate of condom choice could depict the high rate of unprotected sex. The rare use of emergency contraceptives may be attributed to lack of deep knowledge as seen in a study where 28% of the respondents were users (Kistnasamy, Reddy, & Jordaan, 2009)

With the combination of the high level of knowledge and awareness to family planning, positive attitudes to contraceptives, low usage of emergency contraceptives, high usage of condoms and generally, it can be drawn that students are prone to unwanted pregnancies which may be linked to unfavorable outcomes like having drop outs just as seen in results from Okonofua(1995).

#### Study Constraints And Indications For Further Research

1. With the nature of the design which is a cross sectional one, inference of causality was interdicted. Cause and effect was not established. Future research can go deeper in analyzing this and drawing reputable conclusion.
2. Misapprehensions were not able to be determined with the self-administered questionnaires.
3. Future research should identify barriers in proper utilization of family planning and modern contraceptives.
4. A causal-comparative study design can be employed in future research to identify relationships between variables in the study.

## RECOMMENDATIONS

1. Eliminating the barriers identified between parents and their children should be the first step in assuring proper usage of family planning. Sex education is advised to begin at home at an early age whereby parents should be educated and have the ability to discuss such sensitive topics with their children.
2. Although students get awareness of family planning and contraceptives from educational centers like schools and universities, the medium at which the information is perceived should be modified to ensure usage. Students can be actively involved in awareness programs targeting usage of modern contraceptives.
3. In an educational setting, contracts should be signed with hospitals and family planning consultants to enable students have easy access to reliable information during consultations.
4. Contraceptives like condoms and other easily accessible types should be made more affordable to the students by cutting pricing of these contraceptives in the school clinics. If possible, condoms should be shared for free.
5. Sex education should be included in the curriculum in the educational systems especially from high schools till the university level.

## CONCLUSION

The unmet need for family planning and contraception has been on the global rise over the years and has been identified in majorly developing countries despite efforts made for improvement. A focus needs to be drawn to adolescents and young adult as they pose a risk group to unintended pregnancies which may have negative outcomes. Students from the Ternopil National Medical University and other universities in ternopil o'blast of Ukraine seem to have a reasonable knowledge about family planning and contraceptives especially in about being generally informed and possessing the ability to differentiate different forms of contraceptive methods. They have positive attitudes towards family planning and modern contraceptives as they think it is beneficial and have the intension to incorporate it in their various lives in the future. However, the usage of contraceptives were seen to be low regardless of condom being the most preferred and most used method.

Many factors like societal, educational, developmental and psychological can be seen in having an effect on contraceptive use by adolescents and young adults. The use of contraceptives among young people is different in comparison with adults who are married. There is a soaring rate of sexual activities among adolescents and young adults and with the low utilization rate of family planning services and contraceptive, it poses as a public health issue. A requirement in the hostile advocacy in relation to awareness and importance of the exertion of family planning and contraception is essential. Young adults should see themselves as a risk group to unintended pregnancies especially the adolescents which may have complications from teenage pregnancies.

More effective awareness programs should be put in place which actively engages students. Such programs should be able to target risky behaviors exhibited by students in relation to sexual activity and contraceptive use. Accurate dissemination of information to young adults may encourage acceptance and how it is perceived which in return could have a positive effect on their decisions about contraceptive use.

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## ANNEX 1

## Modern Methods

Method	Description	How it works	Effectiveness to prevent pregnancy	Comments
Combined oral contraceptives (COCs) or “the pill”	Contains two hormones (estrogen and progestogen)	Prevents the release of eggs from the ovaries (ovulation)	>99% with correct and consistent use  92% as commonly used	Reduces risk of endometrial and ovarian cancer
Progestogen-only pills (POPs) or "the minipill"	Contains only progestogen hormone, not estrogen	Thickens cervical mucous to block sperm and egg from meeting and prevents ovulation	99% with correct and consistent use  90–97% as commonly used	Can be used while breastfeeding; must be taken at the same time each day
Implants	Small, flexible rods or capsules placed under the skin of the upper arm; contains progestogen hormone only	Thickens cervical mucous to block sperm and egg from meeting and prevents ovulation	>99%  >99% with correct and consistent use	Health-care provider must insert and remove; can be used for 3–5 years depending on implant; irregular vaginal bleeding common but not harmful
Progestogen only injectables	Injected into the muscle or under the skin every 2 or 3 months,	Thickens cervical mucous to block sperm and egg from	97% as commonly used	Delayed return to fertility (about 1–4 months on the average) after use; irregular

	depending on product	meeting and prevents ovulation	>99% with correct and consistent use	vaginal bleeding common, but not harmful
Monthly injectables or combined injectable contraceptives (CIC)	Injected monthly into the muscle, contains estrogen and progestogen	Prevents the release of eggs from the ovaries (ovulation)	97% as commonly used	Irregular vaginal bleeding common, but not harmful
Combined contraceptive patch and combined contraceptive vaginal ring (CVR)	Continuously releases 2 hormones – a progestin and an estrogen – directly through the skin (patch) or from the ring.	Prevents the release of eggs from the ovaries (ovulation)	The patch and the CVR are new and research on effectiveness is limited. Effectiveness studies report that it may be more effective than the COCs, both as commonly and consistent or correct use.	The Patch and the CVR provide a comparable safety and pharmacokinetic profile to COCs with similar hormone formulations.
Intrauterine device (IUD): copper containing	Small flexible plastic device containing copper sleeves or wire that is inserted into the uterus	Copper component damages sperm and prevents it from meeting the egg	>99%	Longer and heavier periods during first months of use are common but not harmful; can also be used as emergency contraception
Intrauterine device (IUD) levonorgestrel	A T-shaped plastic device inserted into the uterus that steadily releases small amounts of levonorgestrel each day	Thickens cervical mucous to block sperm and egg from meeting	>99%	Decreases amount of blood lost with menstruation over time; Reduces menstrual cramps and symptoms of endometriosis; amenorrhea (no menstrual

				bleeding) in a group of users
Male condoms	Sheaths or coverings that fit over a man's erect penis	Forms a barrier to prevent sperm and egg from meeting	98% with correct and consistent use  85% as commonly used	Also protects against sexually transmitted infections, including HIV
Female condoms	Sheaths, or linings, that fit loosely inside a woman's vagina, made of thin, transparent, soft plastic film	Forms a barrier to prevent sperm and egg from meeting	90% with correct and consistent use  79% as commonly used	Also protects against sexually transmitted infections, including HIV
Male sterilization (vasectomy)	Permanent contraception to block or cut the vas deferens tubes that carry sperm from the testicles	Keeps sperm out of ejaculated semen	>99% after 3 months semen evaluation  97–98% with no semen evaluation	3 months delay in taking effect while stored sperm is still present; does not affect male sexual performance; voluntary and informed choice is essential
Female sterilization (tubal ligation)	Permanent contraception to block or cut the fallopian tubes	Eggs are blocked from meeting sperm	>99%	Voluntary and informed choice is essential
Lactational amenorrhea method (LAM)	Temporary contraception for new mothers whose monthly bleeding has not returned; requires exclusive or full breastfeeding	Prevents the release of eggs from the ovaries (ovulation)	99% with correct and consistent use  98% as commonly used	A temporary family planning method based on the natural effect of breastfeeding on fertility

	day and night of an infant less than 6 months old			
Emergency contraception pills (ulipristal acetate 30 mg or levonorgestrel 1.5 mg)	Pills taken to prevent pregnancy up to 5 days after unprotected sex	Delays ovulation	If all 100 women used progestin-only emergency contraception, one would likely become pregnant.	Does not disrupt an already existing pregnancy
Standard Days Method or SDM	Women track their fertile periods (usually days 8 to 19 of each 26 to 32 day cycle) using cycle beads or other aids	Prevents pregnancy by avoiding unprotected vaginal sex during most fertile days.	95% with consistent and correct use. 88% with common use (Arevalo et al 2002)	Can be used to identify fertile days by both women who want to become pregnant and women who want to avoid pregnancy. Correct, consistent use requires partner cooperation.
Basal Body Temperature (BBT) Method	Woman takes her body temperature at the same time each morning before getting out of bed observing for an increase of 0.2 to 0.5 degrees C.	Prevents pregnancy by avoiding unprotected vaginal sex during fertile days	99% effective with correct and consistent use. 75% with typical use of FABM (Trussell, 2009)	If the BBT has risen and has stayed higher for 3 full days, ovulation has occurred and the fertile period has passed. Sex can resume on the 4th day until her next monthly bleeding.
TwoDay Method	Women track their fertile periods by observing presence of cervical mucus (if any type	Prevents pregnancy by avoiding unprotected vaginal sex during most fertile days,	96% with correct and consistent use. 86% with typical or common use.	Difficult to use if a woman has a vaginal infection or another condition that changes cervical

	color or consistency)		(Arevalo, 2004)	mucus. Unprotected coitus may be resumed after 2 consecutive dry days (or without secretions)
Sympto-thermal Method	Women track their fertile periods by observing changes in the cervical mucus (clear texture), body temperature (slight increase) and consistency of the cervix (softening).	Prevents pregnancy by avoiding unprotected vaginal sex during most fertile	98% with correct and consistent use.  Reported 98% with typical use (Manhart et al, 2013)	May have to be used with caution after an abortion, around menarche or menopause, and in conditions which may increase body temperature.
<b>Traditional Methods</b>				
Calendar method or rhythm method	Women monitor their pattern of menstrual cycle over 6 months, subtracts 18 from shortest cycle length (estimated 1st fertile day) and subtracts 11 from longest cycle length (estimated last fertile day)	The couple prevents pregnancy by avoiding unprotected vaginal sex during the 1st and last estimated fertile days, by abstaining or using a condom.	91% with correct and consistent use.  75% with common use	May need to delay or use with caution when using drugs (such as anxiolytics, antidepressants, NSAIDs, or certain antibiotics) which may affect timing of ovulation.
Withdrawal (coitus interruptus)	Man withdraws his penis from his partner's vagina, and ejaculates outside the vagina, keeping	Tries to keep sperm out of the woman's body, preventing fertilization	96% with correct and consistent use  73% as commonly	One of the least effective methods, because proper timing of withdrawal is often difficult to

	semen away from her external genitalia		used (Trussell, 2009)	determine, leading to the risk of ejaculating while inside the vagina.
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**Table 9** shows detailed information on family planning and different contraceptive methods. (WHO, 2018)

## ANNEX 2

### ONLINE SURVEY QUESTIONNAIRE

KNOWLEDGE, ATTITUDE AND PRACTICE OF THE USE OF CONTRACEPTIVES AMONG FOREIGN STUDENTS IN UKRAINE.

Hello,

This survey is about family planning. We would like to assess the knowledge, attitude and practice of the use of modern contraceptives among Foreign students in Ukraine. The survey will take approximately 5 minutes of your time . Thank you in advance for your honest answers.

#### SOCIODEMOGRAPHICS

1. What is your Age in years?

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2. Gender

- Male
- Female

3. Country Of Origin \_\_\_\_\_

#### 4. Marital Status

- Single
- In a relationship
- Married
- Divorced/Separated
- Widowed

#### 5. What is your Religion ?

- Catholic(including Roman Catholics )
- Protestant(including Anglican and Baptist)
- Christian Orthodox
- Muslim
- Jewish
- Hindu
- Buddhist
- Other:\_\_\_\_\_

#### 6. What is your degree program/ university?

- Ternopil National Medical University
- Ternopil Technical University
- Ternopil Economic University
- Other:\_\_\_\_\_

#### 7. Indicate year of study?

- 1st Year
- 2nd Year
- 3rd year
- 4th Year
- 5th Year
- 6th Year

## Knowledge

8. Have you ever heard of family planning/contraceptive?

- Yes
- No

9. Have you ever made any research on contraceptive?

- Yes
- No

10. Ever been informed about family planning or contraceptive?

- Yes
- No

If "YES" Indicate source of information

- Health personnel and hospitals
- Social media,
- friends
- Schools
- Internet
- Other: \_\_\_\_\_

11. Do you think it is important to be informed about Family Planning/Contraceptive?

- Yes
- No
- Not sure

12. Have you heard of Modern Contraceptive Methods?

- Yes
- No

- Maybe

If "YES", have you used any Modern Contraceptive Method?

- Yes
- No

13. Have you heard of Traditional contraceptive methods?

- Yes
- No

If "YES", have you ever used any Traditional Contraceptive Method?

- Yes
- No

14. Which of the following is not a modern contraceptive method?

- Emergency pills
- Combined oral contraceptives
- Vasectomy
- Withdrawal Method
- Condoms

15. Which of the following is a Hormonal contraceptive method?

- Condoms
- Tubal Ligation
- Combined Oral Contraceptive
- Withdrawal Method
- Basal Body Temperature

16. Which of the following is a Barrier contraceptive method?

- Condoms

- Tubal Ligation
- Basal Body Temperature
- Combined Oral Contraceptive
- Withdrawal Method

17. Which of the following is a Traditional contraceptive method?

- Condoms
- Tubal Ligation
- Basal Body Temperature
- Combined Oral Contraceptive
- Withdrawal Method

### **Attitudes**

18. Do you think contraceptives are beneficial?

- Yes
- No
- Maybe

19. Do you think you would adopt family planning in the future ?

- Yes
- No
- Not sure

20. Would you use Modern contraceptives in the future?

- Yes
- No
- Maybe

21. For females, ever had a pregnancy scare?

- Yes
- No

22. Ever been pregnant or gotten a female pregnant?

- Yes
- No
- Maybe

## Practice

23. What was your age at first sex? \_\_\_\_\_

24. Do you have a current sex partner?

- Yes
- No

If yes, do you discuss about modern contraceptive methods with your partner?

- Yes
- No

25. Have you ever used any modern contraceptive method?

- Yes
- No

26. Are you currently using any contraceptive method?

- Yes
- No

If "YES", which of the following modern contraceptives do you use?

- Hormonal Contraceptive( oral contraceptive, Intra-uterine devices levonorgestrel, implants
- Barrier Methods(condoms, diaphragm)
- Withdrawal method
- Surgical methods(tubal ligation /Vasectomy)
- Calendar method

27. What are your reasons for using the contraceptive ?

- Affordable
- Readily available
- More efficient
- Less side effects
- Due to Duration of usage

28. How often do you use contraceptive during periods of sexual activeness ?

- Always
- Most times
- 50% of the time
- Rarely
- Never

29. Have you heard about Emergency Contraceptive?

- Yes
- No
- Maybe

30. Have you ever used any emergency contraceptive?

- Yes
- No

If "YES", How often do you use emergency contraceptive?

- Always
- Most times
- 50% of the time
- Rarely

31. Do you think emergency contraceptives should be used regularly?

- Yes
- No
- Not sure

32. How safe do you think regular use of emergency contraceptives as a method are for the health of women?

- Very safe
- Somewhat safe
- Somewhat unsafe
- Very Unsafe

33. Have you been consistent in contraceptive usage in the past 3 months?

- Yes
- No

34. Are you likely to have unprotected sex in the next 3 months?

- Yes
- No

35. What is your most preferred used contraceptive method?

- Hormonal
- Barrier
- Surgical

- Calendar Method
- Basal Body Temperature Method
- Withdrawal Method

### ANNEX 3

#### Socio-demographic characteristics of the respondents (N=78)

Characteristic	Categories	N	%
<b>Age</b>	18-21 years	29	37.2
	22-25 years	34	43.6
	26 years and older	12	15.4
	missing	3	3.8
<b>Sex</b>	Female	49	62.8
	Male	29	37.2
<b>Country of origin</b>	Nigeria	30	38.5
	Ghana	13	16.7
	Zambia	11	14.1
	India	10	12.8
	Other <sup>1</sup>	14	18.1

<b>Religion</b>	Christian Protestant (including Anglican and Baptist)	27	34.6
	Christian Orthodox	16	20.5
	Christian Catholic (including Roman Catholics)	11	14.1
	Other Christian <sup>2</sup>	6	7.8
	Hindu	9	11.5
	Muslim	7	9.0
	Missing	2	2.6
<b>University</b>	Ternopil National Medical University	55	66.7
	Other	23	33.5
<b>Year of study</b>	1-2 <sup>3</sup>	28	35.9
	3-4	27	34.6
	5-6	23	29.5

<b>Marital status</b>	Married	2	2.6
	In relationship	27	34.6
	Single	49	62.8

<sup>1</sup> “Other” included Zimbabwe (4 respondents), Democratic Republic of the Congo, Kenya and Tanzania (2 respondents each), Afghanistan, Micronesia, Namibia, Uganda(one person from each country).

<sup>2</sup> Including Pentecostal (2), Jehovah's witness (1), nondenominational (1) and not defined (2).

<sup>3</sup> Most of the respondents were on the second year of studying (N=25), and only 3 – on the first.

### Knowledge about FP (N=78)

Family Planning and Contraceptives		N	%
Ever heard about family planning / contraceptives		72	92.3
Ever heard about	Modern contraceptive methods	59	75.6
	Traditional contraceptive methods	42	53.8
	Emergency contraceptive	65	83.3
Can correctly recognize	Modern contraceptive method	59	75.6
	Hormonal contraceptive method	60	76.9

	Barrier contraceptive method	58	74.4
	Traditional contraceptive method	62	79.5
Ever been informed		73	93.6
Ever made a research		52	66.7

**8. Have you ever heard of family planning/contraceptive?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	6	7.7	7.7	7.7
	Yes	72	92.3	92.3	100.0
	Total	78	100.0	100.0	

**12. Have you heard of Modern Contraceptive Methods?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Maybe	13	16.7	16.7	16.7

	No	6	7.7	7.7	24.4
	Yes	59	75.6	75.6	100.0
	Total	78	100.0	100.0	

**13. Have you heard of Traditional contraceptive methods?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	36	46.2	46.2	46.2
	Yes	42	53.8	53.8	100.0
	Total	78	100.0	100.0	

**28. Have you heard about Emergency Contraceptive?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Maybe	1	1.3	1.3	1.3
	No	12	15.4	15.4	16.7
	Yes	65	83.3	83.3	100.0
	Total	78	100.0	100.0	

**14. Which of the following is not a modern contraceptive method?**

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Combined oral contraceptives	8	10.3	10.3	10.3
	Condoms	1	1.3	1.3	11.5
	Emergency pills	2	2.6	2.6	14.1
	Vasectomy	8	10.3	10.3	24.4
	<b>Withdrawal Method</b>	<b>59</b>	<b>75.6</b>	<b>75.6</b>	<b>100.0</b>
	Total	78	100.0	100.0	

**15. Which of the following is a Hormonal contraceptive method**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Basal Body Temperature	9	11.5	11.5	11.5
	<b>Combined Oral Contraceptive</b>	<b>60</b>	<b>76.9</b>	<b>76.9</b>	<b>88.5</b>
	Condoms	3	3.8	3.8	92.3
	Tubal Ligation	5	6.4	6.4	98.7

Withdrawal Method	1	1.3	1.3	100.0
Total	78	100.0	100.0	

**15. Which of the following is a Barrier contraceptive method**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Basal Body Temperature	2	2.6	2.6	2.6
Combined Oral Contraceptive	5	6.4	6.4	9.0
<b>Condoms</b>	<b>58</b>	<b>74.4</b>	<b>74.4</b>	<b>83.3</b>
Tubal Ligation	9	11.5	11.5	94.9
Withdrawal Method	4	5.1	5.1	100.0
Total	78	100.0	100.0	

**16. Which of the following is a Traditional contraceptive method**

	Frequency	Percent	Valid Percent	Cumulative Percent
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Valid Basal Body Temperature	2	2.6	2.6	2.6
Combined Oral Contraceptive	4	5.1	5.1	7.7
Condoms	7	9.0	9.0	16.7
Tubal Ligation	3	3.8	3.8	20.5
<b>Withdrawal Method</b>	<b>62</b>	<b>79.5</b>	<b>79.5</b>	<b>100.0</b>
Total	78	100.0	100.0	

**30. Do you think emergency contraceptives should be used regularly?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	52	66.7	66.7	66.7
Not sure	20	25.6	25.6	92.3
Yes	6	7.7	7.7	100.0
Total	78	100.0	100.0	

**31. How safe do you think regular use of emergency contraceptives as a method are for the health of women?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	1.3	1.3	1.3
Somewhat safe	20	25.6	25.6	26.9
Somewhat unsafe	31	39.7	39.7	66.7
Very safe	11	14.1	14.1	80.8
Very Unsafe	15	19.2	19.2	100.0
Total	78	100.0	100.0	

### Sources of information

#### 9. Have you ever made any research on contraceptive?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	26	33.3	33.3	33.3
Yes	52	66.7	66.7	100.0
Total	78	100.0	100.0	

#### 10. Ever been informed about family planning or contraceptive

	Frequency	Percent	Valid Percent	Cumulative Percent
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Valid	No	5	6.4	6.4	6.4
	Yes	73	93.6	93.6	100.0
	Total	78	100.0	100.0	

## Attitude to FP

### Attitudes to FP (N= 78)

Attitudes	Frequency	Valid Percent
Beneficial	69	88.5
Importance To Be Informed	77	98.7
Adopting Family Planning In The Future	70	89.7
Plans To Use Modern Contraceptive In The Future	59	75.6

### 17. Do you think contraceptives are beneficial?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Maybe	9	11.5	11.5	11.5
Yes	69	88.5	88.5	100.0

Total	78	100.0	100.0	
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**26. What are your reasons for using the modern contraceptive ?(sexually Active Only)**

Resons		Frequency	Percent	Valid Percent
	Affordable	5	8.1	8.1
	Due to Duration of usage	3	4.8	4.8
	Less side effects	11	17.7	17.7
	More efficient	27	43.6	43.6
	Readily available	16	25.8	25.8
	Total	62	100.0	100.0

**11. Do you think it is important to be informed about Family Planning/Contraceptive?**

	Frequency	Percent	Valid Percent	Cumulative Percent
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Valid	Not sure	1	1.3	1.3	1.3
	Yes	77	98.7	98.7	100.0
	Total	78	100.0	100.0	

### Use of Family Planning and intentions to use

#### Use of Family Planning (among sexually experienced, N = 62)

Family Planning And Contraceptives	Method	Frequency	Percent
Ever used	Modern contraceptive method	46	74.2
	Traditional contraceptive method	33	53.2
	Emergency contraceptive method	31	50.0
Mostly Used			
	Variant		
Currently using	Yes	23	37.1
	Barrier Methods		

	(condoms, diaphragm)	21	81% from 26
	<sup>1</sup> Others	2	19% from 26
How often do you use contraceptive during periods of sexual activeness?	Always	20	32.3
Have you been consistent in contraceptive usage in the past 3 months?	No	45	72.6
Most preferred used \contraceptive method?	Barrier	24	38.7

### Have you used any Modern Contraceptive Method?

(N=62)

	Frequency	Percent	Valid Percent
No	27	43.5	43.5
Yes	35	56.5	56.5

Total	62	100.0	100.0
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**Have you ever used any Traditional Contraceptive Method?**

	Frequency	Percent	Valid Percent
No	29	46.8	46.8
Yes	33	53.2	53.2
Total	62	100.0	100.0

**24. Have you ever used any modern contraceptive method**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	16	25.8	25.8	25.8
Yes	46	74.2	74.2	100.0
Total	62	100.0	100.0	

**25. Are you currently using any contraceptive method?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	39	62.9	62.9	62.9
Yes	23	37.1	37.1	100.0

Total	62	100.0	100.0	
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**If YES, which of the following modern contraceptives do you use?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	16	25.8	25.8	25.8
Barrier Methods(condoms, diaphragm)	21	33.9	33.9	59.7
Calendar method	6	9.7	9.7	69.4
Hormonal Contraceptive( oral contraceptive, Intra-uterine devices levonorgestrel, implants	13	21.0	21.0	90.3
Withdrawal method	6	9.7	9.7	100.0
Total	62	100.0	100.0	

**27. How often do you use contraceptive during periods of sexual activeness ?**

	Frequency	Percent	Valid Percent	Cumulative Percent

Valid	50% of the time	4	6.5	6.5	6.5
	Always	20	32.3	32.3	38.7
	Most times	13	21.0	21.0	59.7
	Never	7	11.3	11.3	71.0
	Rarely	18	29.0	29.0	100.0
	Total	62	100.0	100.0	

**29. Have you ever used any emergency contraceptive?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	31	50.0	50.0	50.0
	Yes	31	50.0	50.0	100.0
	Total	62	100.0	100.0	

**If YES, How often do you use emergency contraceptive?**

		Frequency	Percent	Valid Percent
	50% of the time	18	29.1	29.1
	Always	1	1.6	1.6

Most times	5	8.1	8.1
Rarely	38	61.3	61.3
Total	62	100.0	100.0

**32. Have you been consistent in contraceptive usage in the past 3 months?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	45	72.6	72.6	72.6
Yes	17	27.4	27.4	100.0
Total	62	100.0	100.0	

**Intentions to use**

**18. Do you think you would adopt family planning in the future?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No	3	3.8	3.8	3.8
Not sure	5	6.4	6.4	10.3
Yes	70	89.7	89.7	100.0
Total	78	100.0	100.0	

**19. Would you use Modern contraceptives in the future?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Maybe	14	17.9	17.9	17.9
No	5	6.4	6.4	24.4
Yes	59	75.6	75.6	100.0
Total	78	100.0	100.0	

**34. What is your most preferred used contraceptive method?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Barrier	24	38.7	38.7	38.7
Basal Body Temperature Method	1	1.6	1.6	40.3
Calendar Method	5	8.1	8.1	48.4
Hormonal	16	25.8	25.8	74.2
Surgical	1	1.6	1.6	75.8
Withdrawal Method	15	24.2	24.2	100.0
Total	62	100.0	100.0	

## Sexual behavior

### 22. What was your age at first sex?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10	1	1.6	1.6	1.6
	13	1	1.6	1.6	3.2
	14	1	1.6	1.6	4.8
	15	2	3.2	3.2	8.1
	16	1	1.6	1.6	9.7
	17	9	14.5	14.5	24.2
	18	15	24.2	24.2	48.4
	19	8	12.9	12.9	61.3
	20	13	21.0	21.0	82.3
	21	5	8.1	8.1	90.3
	22	2	3.2	3.2	93.5
	23	1	1.6	1.6	95.2
	24	1	1.6	1.6	96.8
	26	1	1.6	1.6	98.4
	27	1	1.6	1.6	100.0
	Total	62	100.0	100.0	

### 23. Do you have a current sex partner?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	32	51.6	51.6	51.6
	Yes	30	48.4	48.4	100.0
	Total	62	100.0	100.0	

**33. Are you likely to have unprotected sex in the next 3 months?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	27	43.5	43.5	43.5
	Yes	35	56.5	56.5	100.0
	Total	62	100.0	100.0	

### **Communication about Family Planning**

**If yes, do you discuss about modern contraceptive methods with your partner?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		5	8.1	8.1	8.1
	No	26	41.9	41.9	50.0
	Yes	31	50.0	50.0	100.0
	Total	62	100.0	100.0	

## Pregnancies and abortions

### 21. Ever been pregnant or gotten a female pregnant?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Maybe	3	4.8	4.8	4.8
	No	46	74.2	74.2	79.0
	Yes	13	21.0	21.0	100.0
	Total	62	100.0	100.0	

### 20. For females, ever had a pregnancy scare?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		15	24.2	24.2	24.2
	No	15	24.2	24.2	48.4
	Yes	32	51.6	51.6	100.0
	Total	62	100.0	100.0	